

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

26 AND 30-40 WEST MARKET STREET (VACANT LOTS)

GENERAL SERVICES ADMINISTRATION FRANK E. MOSS FEDERAL COURTHOUSE EXPANSION PROJECT

SALT LAKE CITY, UTAH



U.S. General Services Administration

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EXECUTIVE SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) conducted at 26 West Market Street and 30 – 40 West Market Street, located in Salt Lake City, Utah (Site). The ESA was conducted by Trarza, Inc. (Trarza) on behalf of the General Services Administration (GSA), in accordance with standard practices described in: 1) the American Society for Testing and Materials (ASTM) Standard E 1527-05; 2) the United States Environmental Protection Agency (USEPA) All Appropriate Inquiries (AAI) standard, and; 3) the additional Property ownership and physical source setting requirements presented in the GSA's Request for Proposal (RFP).

The ESA was conducted to identify, to the extent feasible pursuant to the processes described herein, potential recognized environmental conditions (RECs) associated with the Site, including the presence of potential hazardous substances or petroleum products. The ESA was conducted at the request of the client, in conjunction with a planned expansion of the Frank E. Moss Courthouse and relocation of a nearby structure onto the property.

ESA activities performed by Trarza, pursuant to ASTM E 1527-05, included the following:

- Conducting a Site reconnaissance;
- Interviewing knowledgeable Site personnel;
- Conducting a visual survey of the surrounding properties;
- Reviewing reasonably ascertainable historical maps, literature, and regulatory agency documents related to the Site;
- Reviewing regulatory databases and lists of registered wells on and within a one-mile radius of the Site, and;
- Preparing this report to present the collected data and summarize the findings.

Based on the information gathered through visual observations and a review of reasonably ascertainable records, the following potential RECs were identified at the Site:

- The presence of a transformer building at 40 West Market Street;
- The presence of an unprotected monitoring well location which may create a conduit for groundwater infiltration into the subsurface;
- Potential subsurface soil and groundwater impacts may exist, based on historical use of the property, and;
- Potential subsurface groundwater impacts may exist based on the findings of previous environmental investigations performed at adjacent properties.

No other potential RECs were identified during the course of the Phase I ESA investigation activities.

LIST OF ACRONYMS

AAI	All Appropriate Inquiries
ACM	Asbestos-Containing Material
AMSL	Above Mean Sea Level
AST	Above-Ground Storage Tank
ASTM	American Society of Testing and Materials
BGS	Below Ground Surface
BMP	Best Management Practices
CDL	Clandestine Drug Laboratories
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
DERR	Division of Environmental Response and Remediation
DOD	Department of Defense
DOT	Department of Transportation
EDR	Environmental Data Resources
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FINDS	Facility Index System/Facility Registry System
FTTS	FIFRA / TSCA Tracking System
FUDS	Formerly Used Defense Sites
GRAMA	Government Records Access and Management Act (Utah)
GSA	General Services Administration
HMIRS	Hazardous Materials Information Reporting System
HVAC	Heating, Ventilation, and Air Conditioning
ICIS	Integrated Compliance Information System
IOOF	Independent Order of Odd Fellows
LAST	Leaking Aboveground Storage Tank
LQG	Large Quantity Generator
LUCIS	Land Use Control Information System
LUST	Leaking Underground Storage Tank
MLTS	Material Licensing Tracking System
NFA	No Further Action
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
ODI	Open Dump Inventory
PADS	PCB Activity Database System
PCB	Poly-Chlorinated Biphenyl
PCE	Tetrachloroethene
pCi/L	picoCuries per liter
PUD	Public Utilities Department
PVC	Poly-vinyl Chloride

PWS	Federal Public Water System
RAATS	RCRA Administrative Action Tracking System
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RFP	Request for Proposal
SSTS	Section 7 Tracking Systems
STATSGO	State Soil Geographic Database
SWF/LF	Solid Waste Facilities/Landfills
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility
UDEQ	Utah Department of Environmental Quality
UMTRA	Uranium Mill Tailings Remedial Action
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VCUP	Voluntary Clean-Up Program

1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) conducted at 26 West Market Street and 30 – 40 West Market Street, located in Salt Lake City, Utah (Site). The ESA was conducted by Trarza, Inc. (Trarza) on behalf of the General Services Administration (GSA), in accordance with standard practices described in: 1) the American Society for Testing and Materials (ASTM) Standard E 1527-05; 2) the United States Environmental Protection Agency (USEPA) All Appropriate Inquiries (AAI) standard, and; 3) the additional Property ownership and physical source setting requirements presented in the GSA's Request for Proposal (RFP).

The ESA was conducted to identify, to the extent feasible pursuant to the processes described herein, potential recognized environmental conditions (RECs) associated with the Site, including the presence of potential hazardous substances or petroleum products. The ESA was conducted at the request of the client, in conjunction with a planned expansion of the Frank E. Moss Courthouse and relocation of a nearby structure onto the property.

1.1 Objectives

The ESA was conducted to identify, to the extent feasible pursuant to the processes described herein, potential recognized environmental conditions (RECs) associated with the Site. According to ASTM Standard E 1527-05, a REC is defined as *"the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws."* RECs are not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment.

1.2 Detailed Scope of Services

Trarza personnel performed both on- and off-Site activities as part of this Phase I ESA, including: an on-Site reconnaissance of the subject properties and structures on July 13, 2007; attempted interview with David Bernolfo, the client-designated knowledgeable Site individual on July 12, 2007; examination of client-provided historic Site documentation; a review of Site environmental data provided by Environmental Data Resources, Inc. (EDR), and; on- and off-Site title/directories research. The complete Site-specific scope of work performed during this ESA, conducted in accordance with ASTM Standard E 1527-05, included the following activities:

- Conducting a Site reconnaissance, consisting of a detailed visual survey of the property and inspection of ancillary structures and property for indications of the presence or potential presence of hazardous substances or petroleum products;
- Attempted interviewing of Mr. Bernolfo, who is knowledgeable of the Site history, operations, practices, and surrounding land uses, on July 12, 2007;
- Conducting a visual survey of the surrounding and/or adjacent properties, to the extent feasible during the Site reconnaissance;

- Reviewing reasonably ascertainable historical maps, literature, and regulatory agency documents related to the Site;
- Reviewing current regulatory databases and lists of registered wells on and within a one-mile radius of the Site, and;
- Preparing this Report to present the collected data and summarize the findings.

In addition, an expanded Property ownership and physical source setting investigation, as well as activities conducted in conformance with the EPA AAI Standard, were performed as described in the RFP.

1.3 Limitations

This Report was prepared for the exclusive use of the GSA and their designees. The assessment presented herein is limited strictly to identifying potential environmental liabilities, or RECs, associated with the subject property. The findings and conclusions are based on a visual inspection of the Facility and the Site property, information obtained from interviews with client-designated knowledgeable personnel regarding its use and history, and information obtained from a review of reasonably ascertainable current and historical records. No warranties, expressed or implied, are provided for any of the third party information provided herein, including that provided by client-designated personnel.

As specified in the RFP, this Report was prepared pursuant to the USEPA Standards and Practices for AAI. This Standard, as promulgated in 40 CFR Part 312, requires that all appropriate inquiries be made into the presence or potential presence of hazardous substances or petroleum products potentially located at the Site. A statement of qualifications for the environmental professional conducting this environmental assessment is included in Appendix A.

Potential environmental issues or RECs may exist on the Site that were not identified; exclusion from this Report does not preclude the existence of environmental conditions, including but not limited to the existence of unidentified potentially hazardous substances, petroleum products, or other hazards.

This Report was prepared at the request of the GSA, and as such should not be construed as providing a legal interpretation of, or meeting the requirements of, environmental regulations. Trarza assumes no responsibility or liability for errors in publicly available data, statements or interpretations from sources outside of Trarza, or developments resulting from scenarios outside the scope of this Phase I ESA. Further, should the GSA be aware of conditions not identified in this report, Trarza should be apprised of such as soon as possible to provide appropriate consultation.

Historic information and data provided by GSA-designated personnel was utilized in performing this Phase I ESA. Historic Phase I and Phase II ESA reports have been prepared for the property and were supplied by the GSA. Trarza assumes no responsibility for the accuracy or completeness of this third-party information.

2.0 SITE DESCRIPTION

The following sections provide a description of the legal and physical setting of the Site properties, a discussion of the current uses of the Site, and a description of surrounding properties and their current uses.

2.1 Location and Legal Description

The Site properties are located on adjoining parcels, each of which is completely occupied by either parking surfaces and/or a small transformer building (Appendix G). The physical addresses of the three Site buildings/properties are 26 West Market Street and 30 – 40 West Market Street, Salt Lake City, Utah 84101. The Site is located at an approximate latitude of 40° 45' 42.1'' and an approximate longitude of 111° 53' 31.9'', at an elevation of approximately 4,271 feet above mean sea level (amsl). The Site is located wholly within Salt Lake County, Utah.

The legal descriptions, as indicated by the Salt Lake County Recorder are as follows:

- Parcel Number 1501430003 (40 West Market Street) – 0.1 acres - BEG 16 FT S FR NW COR OF LOT 7, BLK 51, PLAT A, SLC SUR; W 20 FT; S 20 FT; E 20 FT; N 20 FT TO BEG.
- Parcel Number 1501430006 (30 West Market Street) – 0.2 acres - 1/2 INT: COM 16 FT S FR NW COR LOT 7 BLK 51 PLAT A SLC SUR E 77.5 FT S 116 FT W 77.5 FT N 116 FT TO BEG.
- Parcel Number 1501430009 (26 West Market Street) – 0.2 acres - 41.91 PERCENT INT: BEG 33 FT N & 77.5 FT E FR SW COR LOT 7, BLK 51, PLAT A, SLC SUR; E 77.5 FT; N 108 FT; N 45° W 11.31 FT; W 69.5 FT; S 116 FT TO BEG.

2.2 Site and Vicinity General Characteristics

The Site properties are located on adjoining parcels along West Market Street between West Temple and South Main Streets. The dates of the original Site building construction, according to Salt Lake County Recorder records, were as follows:

- 26 West Market Street – 1975;
- 30 West Market Street – 1975, and;
- 40 West Market Street – No date indicated.

At the time of the Site reconnaissance, access was available to the parking lot areas, but access was not provided for the transformer building located at 40 West Market Street.

Additional information regarding the ownership and use(s) of the Site properties is provided in Section 4.0.

Surrounding property information is provided in Section 2.5.

2.3 Current Use of the Properties

The Site properties are currently used in the following manners:

- 26 West Market Street – Parking area, includes a guard shack with access gate;
- 30 West Market Street – Parking area, and;
- 40 West Market Street – Transformer building.

Currently, the GSA is planning to acquire the subject properties as part of the Frank E. Moss Federal Courthouse Expansion Project. The subject properties are to be utilized as a relocation area for the Odd Fellows building, which is currently located directly across West Market Street. The Courthouse is located at 350 Main Street in Salt Lake City, Utah.

The interior of the transformer building was not assessed during this Phase I ESA due to access constraints.

2.4 Description of Structures, Roads, and Other Improvements on the Site

The properties serve as paved parking spaces which are generally unobstructed by surface features. Various Site photos are presented in Appendix B as S-1 through S-8. The following structures are located on the Site.

- An asphalt-covered parking lot with guard shack and inlet/outlet driveway, and;
- Transformer building located on 40 West Market Street (photos S-2 – S-5, Appendix B).

A Site layout sketch is presented on Figure 1 in Appendix G.

It is assumed that electrical utilities enter the property via subsurface utility lines, based on existing utility marking on the eastern portion of the Site. The existence of additional and/or unmarked subsurface utilities was not ascertained.

Additional Site, structure, and utility information obtained during Site reconnaissance is presented in appropriate sections of this report.

2.5 Current Uses of the Adjoining Properties

The Site property is bounded to the north by a vacant building, additional parking, and the Zion Bank building. The Site is bounded to the east by a restaurant and additional parking.

To the south of the Site is West Market Street. The Odd Fellows building is located immediately across West Market Street. The Odd Fellows property was also the subject of Phase I ESA activities which were performed previously by others for the GSA. To the west of the Site is office and restaurant space and additional parking area.



*Phase I ESA
Frank E. Moss Courthouse Expansion
Phase I ESA Report*

No environmental issues related to practices at the adjoining properties are known to affect environmental conditions at the Site. This was confirmed, to the extent possible, by observational evidence collected during the Site reconnaissance.

3.0 CLIENT-PROVIDED INFORMATION

This section presents information provided by the GSA and/or their designees.

3.1 Historical Report Information

The GSA provided several historical assessment reports that were prepared for adjacent properties. Assessment activities were conducted to identify the status of environmental conditions within the area of the proposed courthouse expansion. The following table identifies the reports provided by the GSA and summarizes the findings contained therein.

Report	Date Submitted	Consultant	Property	Deviations	Findings
Phase I Environmental Assessment - For Proposed New Annex to the Frank E. Moss Courthouse	January 1997	Balloffet and Associates, Inc Fort Collins Colorado	Gardiner Property	1. Property Owners and tenants were not contacted or interviewed	No evidence of substandard environmental conditions. Exceptions: Drains and sumps in garage area where petroleum hydrocarbons and/or solvents may have been used.
			Odd Fellows Building	2. Inspections of the interior of buildings were limited to those with public access.	No evidence of substandard environmental conditions. One 55-gallon drum was observed containing an unknown liquid.
			Osterloh Property		Possible PCB, metal, and petroleum hydrocarbon impacts to soil and groundwater
Phase II Site Assessment - Frank E. Moss Federal Courthouse Expansion	September 2002	Entranco Fort Collins Colorado	Moss Court House	None	Soil and groundwater investigation indicated that very low concentrations of volatile organics were present, however, concentrations were consistently below State action levels.
			Odd Fellows Building	None	
			38 West Market Street	1. Property owner would not grant access to property.	

			West Temple Chevron	1. Property owner would not grant access to property.	
			Gardiner Building	None	
Phase II Site Assessment Report – Frank E. Moss Courthouse Expansion Chevron Station and Odd Fellows Relocations Property	July 3, 2003	AMEC Earth and Environmental, Inc. Salt Lake City	West Temple Chevron	None	The UST basin in the southwest corner of the property is identified as an area of concern. Soil and groundwater analysis indicated concentrations of contaminants in excess of the State actions levels.
			30 and 40 West Market Street	None	Soil and groundwater investigation indicated that very low concentrations of volatile organics were present, however, concentrations were consistently below State action levels.

3.2 Reason for Performing Phase I ESA

This Phase I ESA was performed at the request of the GSA in order to assess the environmental conditions of the subject properties prior to potential acquisition as part of the Frank E. Moss Federal Courthouse Expansion Project.

4.0 RECORDS REVIEW

The objective of the records review was to identify potential activities or conditions of environmental concern at the Site and adjacent properties. A review of environmental agency database records for the Site and surrounding area was obtained from the EDR report generated on July 9, 2007. EDR's search of available government records included both the Site and a search radius surrounding the Site in accordance with the appropriate minimum search distances specified in ASTM Standard E 1527-05. Additional records, including client-provided documentation, sanborn maps, owner-provided information, directories, and photos are also referenced in the section where appropriate. The EDR report is presented as Appendix D.

4.1 EDR Standard Environmental Record Sources

Federal standard environmental record sources and databases searched by EDR included:

- Proposed National Priority List (NPL) Sites;
- Delisted NPL Sites;
- NPL LIENS;
- Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS);
- Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal Facilities (TSDFs);
- RCRA Large-Quantity Generator (LQG) Information;
- Emergency Response Notification System (ERNS) Information;
- Hazardous Materials Information Reporting System (HMIRS) Information;
- Engineering Controls Sites List;
- Sites with Institutional Controls;
- Department of Defense (DOD) Sites;
- Formerly Used Defense Sites (FUDS);
- Brownfields Sites;
- Uranium Mill Tailings Remedial Action (UMTRA) Sites;
- Open Dump Inventory (ODI);
- Toxic Chemical Release Inventory System (TRIS);
- Toxic Substances Control Act (TSCA) Sites;
- Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) / TSCA Tracking System (FTTS);
- Section 7 Tracking Systems (SSTS);
- Land Use Control Information System (LUCIS);
- Department of Transportation (DOT) OPS Incident and Accident Data;
- Integrated Compliance Information System (ICIS);
- FTTS FIFRA/TSCA Tracking System Administrative Case Listing;
- Clandestine Drug Labs (CDLs);
- Radiation Information (RadInfo) Database;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Lien Information;

- Poly-Chlorinated Biphenyl (PCB) Activity Database System (PADS);
- Material Licensing Tracking System (MLTS);
- Mines Master Index File;
- Facility Index System/Facility Registry System (FINDS), and;
- RCRA Administrative Action Tracking System (RAATS).

The State of Utah does not maintain a list of hazardous waste sites. Standard State environmental record sources and databases searched by EDR included:

- List of Landfills (SWF/LF);
- Leaking Aboveground Storage Tank (LAST) Sites;
- Spills Data;
- Sites with Institutional Controls;
- Registered Drycleaners;
- Brownfields Assessment Sites Listing, and;
- National Pollutant Discharge Elimination System (NPDES) Permitted Facilities Listing.

In addition, EDR researched the following Tribal databases:

- Indian Reservation Sites;
- Leaking Underground Storage Tank (LUST) on Indian Land, and;
- Underground Storage Tanks (USTs) on Indian Land.

EDR also searched its proprietary historical database of former manufactured gas (coal gas) sites. Based on a review of these information sources, the following sites of interest were identified by EDR.

4.1.1 Federal Sites

NPL

One NPL Site, Utah Power and Light/American Barrel Company, was identified within the ASTM search radius. This facility is also identified on several other Federal databases. The Power and Light/American Barrel Company facility, located between ½ to 1 mile northwest of the Site, is reportedly at a relative higher elevation than the Site properties. Data indicates that soils and shallow groundwater beneath this facility are contaminated with styrene attributable to former barrel yard activities, and polyaromatic hydrocarbons and phenolic compounds attributable to former creosote operations.

Based on the extensive data available regarding the contamination associated with the Power and Light/American Barrel Company NPL Site, as well as the absence of groundwater wells located on the Site properties, this facility does not represent a REC to the Site.

CERCLIS

EDR identified four CERCLIS facilities within ½ mile of the Site, the first three of which are reportedly at a lower relative elevation than the Site, with the fourth facility reportedly at a higher relative elevation than the Site. These facilities include the following:

- BLOCK 35 Methylene Chloride Plume – Groundwater methylene chloride contamination;
- 200 South 300 West Plume – Groundwater tetrachloroethene (PCE) contamination;
- Vermiculite Intermountain – Receiving facility for asbestos-contaminated vermiculite from Libby, Montana, and;
- Employment Security Administration – Contaminated subsurface soil excavation site.

Based on the extensive data available regarding the contamination associated with these facilities, their predominantly lower relative elevation than the Site, and the absence of groundwater wells located on the Site properties, these facilities do not represent RECs to the Site.

Additional RCRA Corrective Action Sites (CORRACTS)

EDR identified two additional RCRA corrective action facilities, facilities within 1 mile of the Site, both of which are reportedly at a lower relative elevation than the Site. As it is reported that neither of these facilities currently require corrective action, they do not represent RECs to the Site.

Hazardous Waste Generators

Eleven additional facilities, including the Frank E. Moss Federal Courthouse, were identified by EDR as hazardous waste generation facilities. As no violations were reported at any of these facilities, they do not represent RECs to the Site.

4.1.2 State Sites

EDR identified 50 closed LUST sites, 27 UST sites, and one above-ground storage tank (AST) site within ¼ to ½ mile of the Site. Based on the sheer number of LUST, UST, and AST sites identified, it is possible that groundwater contamination from one or more of these sites has migrated towards or beneath the Site. However, monitoring well installation and sampling would be required to determine whether any of these LUST facilities represent a REC to the Site.

One state Voluntary Clean-Up Program (VCUP) site was identified by EDR within the search radius. As it was reported that a No Further Action (NFA) letter was received by this facility, it does not represent a REC to the Site.

The Utah Power and Light/American Barrel Company facility was also identified as a manufactured gas plant Site. As previously discussed, this facility does not represent a REC to the Site.

Nineteen facilities were labeled by EDR as unmappable (orphan). Further information on these Sites was either not available or not provided.

4.2 Physical Source Setting

EDR provides a search of physical setting source records on and adjacent to the Site. The results of these records searches are described in the following subsections. Trarza personnel also conducted additional physical source setting research, as requested in the RFP. This additional physical source setting information is presented in Section 5.0.

4.2.1 EDR Proprietary Database of Groundwater Flow Information (Aquiflow®)

The Site was not mapped in the Aquiflow® database.

4.2.2 Federal Emergency Management Agency (FEMA) Flood Zone Mapping

The Site is located within FEMA Flood Plain Panel number 4901050031A. According to the EDR-provided map, the Site is not within either the 500-year or 100-year flood plain.

4.2.3 National Wetlands Inventory (NWI)

The Site is mapped within the NWI system. According to the EDR-provided map, the Site is not located within or adjacent to any mapped wetlands.

4.2.4 EPA Radon Zones

Both State and Federal radon gas concentration information is provided for the Site. According to the data provided by EDR, the Site is located within EPA radon zone 2. The Federal average local radon gas concentration is reported to be 1.67 picoCuries per liter (pCi/L) for living spaces, and 2.96 pCi/L for basements, based on a survey of 52 locations. The State information, based on a survey of one location, indicates an average radon gas concentration of 4.4 pCi/L.

4.2.5 USGS 7.5 Minute Topographic Map

Regional United States Geological Survey (USGS) topographic maps indicate that surface topography in the region of the Site slopes downward from the north to the south (from the foothills of the Wasatch Mountains), and likewise from the east to the west. The generalized topographic gradient is to the south-southwest. While surface topography generally indicates the primary direction of surface water flow, the Site is located within a developed area with little local elevation variability.

4.2.6 USGS Geologic Age and Rock Stratigraphic Unit Map – Geology of the Conterminous U.S.

Available geologic information identifies stratified geologic sequences in the general area of the Site, with Cenozoic Era rock formations being the dominant rock stratigraphic units. Specifically, Quaternary series stratigraphy, designated as Q, is dominant within the area of the Site.

4.2.7 United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) State Soil Geographic Database (STATSGO)

STATSGO soil maps are compiled by generalizing more detailed soil maps and thus represent general soil conditions in an area. Based on the STATSGO map, the dominant soil composition in the general area of the Site was identified as Kidman very fine sandy loam, which is characterized by moderate infiltration rates, deep and moderately deep, moderately well and well drained soils with moderately coarse textures. The soils have intermediate water holding capacity, and are underlain by silty loam, silty clay loam, and gravels. Bedrock is reportedly greater than five feet below ground surface (BGS).

4.2.8 Federal USGS Well Information

The Federal USGS well information database identified eight USGS wells between ½ and one mile from the Site. Based on the records provided, these wells, some of which were not completed, appeared to be used for groundwater depth and quality monitoring by the USGS. Available data from these wells indicates depths to groundwater, within the geologic unit, ranging from 105 to 186 feet BGS. No other information on these wells is provided.

4.2.9 Federal Public Water System Well Database

The Federal Public Water System (PWS) database identified one PWS well between 1/8 and 1/4 miles of the Site. This active well is identified as well ID UT4901767. The PWS is named as 'Bryants Fork Summer Homes,' located in Orem, Utah. The owner of this well is not listed. The PWS is reported as having several major violations, primarily nitrate and coliform concentration exceedances. No violations or enforcement actions are listed as being associated with this well. No other well information is provided.

4.2.10 State of Utah Well Database

The State of Utah well database located 113 additional water supply well permits/permit applications within one mile of the Site. The majority of these wells are listed as being permitted as underground water wells (production wells), subsurface drains, or non-production (monitoring) wells. One well, located between ½ and one mile from the Site, is reportedly part of the Salt Lake City municipal water supply system. This well is reportedly a surface water feature, used for irrigation and livestock watering.

4.3 Aerial Photographs

Aerial photographs of the Site properties were obtained for the years 1950, 1962, 1977, 1987, and 1993. These photographs, which are presented in Appendix D, indicated that the Site has remained generally unchanged during the subject years. However, the detail available from the aerial photos is not sufficient to identify specific structural details that may indicate the presence of absence of RECs.

4.4 Historic Fire Insurance Maps

Historic fire insurance maps (Sanborn maps) were obtained for the properties from two sources. The EDR records search yielded maps from the years 1884, 1889, 1898, and 1911. These maps are presented in Appendix E. Photographs of Sanborn maps were also obtained from the Utah State Historical Society Archives for the years 1926, 1951, and 1956 along with a photocopy of the map from 1969. Images of these maps are also presented in Appendix E.

These maps indicate the following properties, buildings, and/or ownership Site data:

- 1884: No structures on the Site property;
- 1889: No structures on the Site property;
- 1898: Three residential dwellings on the Site property;
- 1911: Transformer building (42 ½ West Market) on the Site property;
- 1926: Transformer building (42 ½ West Market) on the Site property;

- 1951: Transformer building (42 ½ West Market) on the Site property;
- 1956: Transformer building (42 ½ West Market) and metal building indicating “Gas and Oil” (24 West Market) on the Site property;
- 1969: Transformer building (42 ½ West Market) and metal building indicating “Gas and Oil” (24 West Market) on the Site property;

Note: West Market Street was historically referred to as “Post Office Place.”

4.5 Historical Use Information on the Property

Historic use of the property was predominantly obtained from review of city directories, Sanborn maps, the EDR report, and other historical sources, as well as the observed current and inferred past surrounding land use. A summary of historic property use is displayed on Table 1. In addition, photocopies of the historical directories are included in Appendix F.

The 40 West Market Street property contains a single story brick utility structure that appears to have historically been and may be currently used to house an electrical transformer. Tarza personnel were unable to gain access to view the inside of the structure; however, visual observations made from the outside included presence of electrical service from an overhead utility pole, a “Danger High Voltage” sign attached to a locked steel entrance door, and former window openings that have been sealed with brick. Photographs of the building are presented in Appendix B, photos S-2 – S-5.

Based on Sanborn map data, the utility structure appears to have been constructed sometime between 1898 and 1911. The structure can be found on Sanborn maps from 1911 through 1969, and is identified as a transformer with an address of 42 ½ West Market Street. The current property owner is listed as Utah Power & Light (Pacific Corp).

Tarza performed a parcel search and spoke with a Salt lake County Recorders Office representative who identified two owners and parcel numbers associated with the property.

- Parcel # 150143003 is owned by Utah Power & Light (currently listed as owner)
 - The parcel is listed as having no structure.
 - The parcel is listed as property type #955, designated as a strip center.
 - The mailing address is: R. Strong at PacifiCorp at 700 NE Multnomah St # 700 Portland, OR 97232.
- Parcel # 1501430006-1004 is owned by a BP Associates LLC
 - Property gets a special taxing (building & ground are taxed), which usually indicates that the Assessor actually owns the land;
 - The parcel is listed as property type #902, designated as vacant land industrial;
 - There is an undivided property interest.

The Business Services Unit for Rocky Mountain Power (also PacifiCorp) indicated to Trarza that the only active station or transformer they have in this area is located at 48 W Market St. The PacifiCorp representative was unable to find any information that substantiated the ownership of or service to the facility at 40 W Market associated with PacifiCorp.

The contact for BP Associates was identified as David Bernolfo. Mr. Bernolfo was contacted on July 12, 2007, but declined to provide any additional information concerning the property.

Table 1 includes a list of the directory search results for the properties. Historic listings for addresses do not consistently list 26 and 30 – 40 West Market Street. In conjunction with the Sanborn maps listed in Section 4.4, the following historical listings have been identified for the Site:

- Associated Gas & Oil Co, Post Office Service Station, and Sears Roebuck and CO service station existed for varying timeframes between approximately 1929 and 1944 at the 30 West Market Street address;
- Egbert Heber C auto parking between approximately 1949 and 1973 at 28 West Market Street. One listing, for 1953, indicates that the address was a gas station and auto parking;

The transformer building is located on the Sanborn maps, but contains no directory listing.

Identification of the “Oil and Gas” structure indicated on the Sanborn maps and the directory information for service stations may indicate that petroleum products were used and/or stored on Site at one point. No additional or confirmatory information sources were identified. As such, the historical presence or absence of petroleum storage tanks or potential spills could not be readily identified.

A review of historical newspaper clippings for the property was also requested at the Utah State Historical Society. No clippings were available for the Site properties, according to historical society personnel.

4.6 Historical Use Information on Adjoining Properties

A search of available government records was requested for the Site and surrounding properties under the Government Records Access and Management Act (GRAMA). The request was submitted to the Division of Environmental Response and Remediation on July 10, 2007. Trarza was subsequently contacted by the DERR to indicate that there are no available records on file for the subject property.

The summary presented in Section 3.1 presents information detailed in the client-provided former Phase I and Phase II ESA reports for adjacent properties. These reports contain detailed information regarding additional uses and potential/known environmental impacts on adjacent properties.

Table 1 also includes a summary of the historical directory listings for properties adjacent to the Site.

5.0 SITE PHYSICAL SOURCE SETTING

This section provides general information regarding the physical source setting of the Site. Site-specific information is also included in appropriate sections of this report. Additional details regarding geology, surface hydrology, and hydrogeology is available in the GSA-provided documents.

Surface Water

Historic flow from City Creek included a south-flowing fork which carried irrigation water to Salt Lake City. Topographical information indicates that the historic alignment of this portion of City Creek is upgradient of site location. The City Creek appears to end approximately 5,600 feet or more to the north-northeast. As such, there is a possibility that the alluvial sediments of the former creek bed may provide a zone of relatively higher hydraulic conductivity. Therefore these sediments could potentially allow for more rapid flow of groundwater. The condition of the subsurface soils, however, cannot be determined without soil borings or from observations made during basement excavation. An additional surface water body is the Jordan River, which lies over 8,000 feet to the west of the site location.

The shallow groundwater beneath the site is approximately 10 to 20 feet below ground surface, based on soil and groundwater investigations nearby. The apparent regional groundwater flow direction is to the south-southwest. The shallow groundwater is not a source of water for the area. The Salt Lake City Department of Public Utilities states that approximately 80% of the public drinking water comes from streams and reservoirs in the Wasatch canyons. The other 20% comes from deep water wells in the Salt Lake Valley. The deep aquifer which this water is supplied appears to be confined throughout the Salt Lake Valley. The deep aquifer is mainly below depths of 100 feet below ground surface. The area is part of the Utah Lake/Jordan River Water Rights Area and is currently closed to any new appropriations for water wells.

Per the Points of Diversion Plot by the Utah Division of Water Rights, the nearest municipal drinking water well is greater than 3,000 feet from the site location.

Geology

The regional formation consistent with this area is unconsolidated to semi-consolidated Tertiary Age sediments overlain by unconsolidated Quaternary Age sediments. Based on subsurface soil investigations conducted near the site location, the subsurface soils consist of sand to sandy silts and gravels.

Hydrogeology

Based on surface topography, which will often dictate groundwater flow direction, as well as groundwater potentiometric surface indications in GSA-provided documents, the predominant groundwater flow direction beneath the Site is southwest. There is currently no additional information regarding Site-specific variations in the groundwater flow direction.

As indicated from a Public Utility Department interview, the shallow water bearing zone below the Site is not a current or future potable water source.

6.0 SITE RECONNAISSANCE

A Site reconnaissance was conducted July 13, 2007 in order to visually observe potential Site RECs and verify information provided in the records review, to the extent possible.

6.1 Methodology and Limiting Conditions

A methodical and comprehensive Site reconnaissance was performed to the extent possible given the conditions encountered. Trarza personnel initiated the Site reconnaissance by examining each property, with a thorough walk-through of accessible areas. All buildings and rooms were accessible, with the following exceptions:

- The transformer structure at 40 West Market Street.

6.2 General Site Setting

The properties are located in the downtown area of Salt Lake City. Surrounding properties, which are predominantly commercial, consist of parking areas, restaurants, the courthouse, the Odd Fellows building, vacant lots, and other commercial space. The properties are displayed on the client-provided map (Appendix G).

The properties serve as parking spaces and are generally unobstructed by surface features. The area slopes consistently to the south, towards West Market Street. Stormwater drainage structures exist, which provide drainage across the south-running sidewalk to the gutter. Various Site photos are presented in Appendix B as S-1 through S-8.

6.3 Interior Observations

Structures existing on the Site include the transformer building and the guard shack. Interior observations for the guard shack are not presented as the size and use of the structure is not applicable to the focus of this Phase I ESA. Access to the transformer building was not obtained and therefore observations are not presented.

6.4 Exterior Observations

Exterior reconnaissance of the Site was conducted with an emphasis on identifying conditions that might indicate potential environmental impacts. The Site was examined for signs of soil disturbances, such as excavations or areas of filling or grading suggestive of improper disposal of waste, soil or debris stockpiles, as well as evidence of spills or releases, such as pools of liquid, or surface staining on soil or pavement.

Property layout sketches were created during site reconnaissance and are presented in Appendix C.

6.4.1 Roads and Physical Features

Portions of the Site are bound to the north, east, and west by paved parking areas. Paved and concrete areas on and adjacent to the Site, including, parking lots, sidewalks, and roadways, appeared to be in good condition. Roads or paths with no apparent outlet were not observed during the Site reconnaissance.

A subsurface monitoring well was observed on the Site as displayed in photo S-8 in Appendix B. The well is constructed of a 1-inch diameter Sch-40 polyvinyl chloride (PVC) well casing and covered by a PVC slip cap. During Site reconnaissance, the cap was readily removed by hand and subsequently replaced as found. No other surface protection aside from the cap exists to protect the structure from surface water infiltration, vehicle traffic, snow plows, etc. The monitoring well is assumed to have been installed during the July 2003 Phase II assessment activities. There may be an additional monitoring well on the property, based on the Phase II report, but it was not observed due to several parked automobiles.

The properties are covered with impervious surfaces, therefore no excavation, non-vegetated areas, or stressed vegetation was observed. Surface staining of the parking surfaces at the Site was observed. Staining is consistent with typical vehicle oil and grease drippings.

6.4.2 On-Site Utilities

As indicated, the transformer building located at 40 West Market Street is assumed to have historically provided electrical power to the businesses located to the west of the properties.

6.4.3 Storage Tanks and Containment Areas

No exterior ASTs or USTs were observed or reported on the properties during site reconnaissance.

There are no containment structures observed on Site.

6.4.4 Groundwater, Surface Water, and Discharge Points

Stormwater run-off from the Site properties generally flows south along the Site topography towards West Market Street. Stormwater which runs from the impervious areas of the Site drains via gravity to the city road and gutter system and is collected in the stormwater collection system. Four drainage structures were observed on the Site properties (Appendix B, S-6 – S-7). No treatment is performed on stormwater prior to flow into the Jordan River and eventually to the Great Salt Lake. Historically, stormwater runoff has been collected in the same manner, although during the 1990's, control of the stormwater system was transitioned to the Department of Public Utilities. Previous management was conducted by the public works department. The Department of Public Utilities is supported through an enterprise fund whose revenues are generated through user and impact fees. The fees are calculated based on parcel size and impervious areas.

Information from the Department of Public Utilities indicated that areas which exceed 1-acre require best management practices (BMPs) as well as stormwater retention measures. Based on Site information from the Salt Lake County Recorder, the properties do not exceed 1-acre.

Surface Water

Historic flow from City Creek included a south-flowing fork which carried irrigation water to Salt Lake City. Anecdotal information indicates that the historic alignment of this portion of City Creek is nearby the site location. As such, there is a possibility that the alluvial sediments of the former creek bed may provide a zone of relatively higher hydraulic conductivity. Therefore these sediments could potentially allow for more rapid flow of groundwater. The condition of the subsurface soils though cannot be determined without soil borings or from observations during basement excavation.

The shallow groundwater beneath the site is not a current or future water source.

6.4.5 *Hazardous Substances and Petroleum Products*

No evidence of potential hazardous materials, petroleum spills, or unknown odors was observed during the Site reconnaissance.

7.0 INTERVIEWS

An interview was attempted with Mr. David Bernolfo, who is the client-provided contact for Bamberger Co, which is reportedly a partial owner of the properties. Mr. Bernolfo declined to provide information to Trarza.

Additional information resources that were contacted while conducting this assessment include:

- Katie – Business services, PacifiCorp Electric Company (Rocky Mountain Power)
- Lorna Hackford – Division of Environmental Response and Remediation
- Deann Bekstad – Salt Lake County Clerk and Recorder
- Bradley Steward – Development Engineer; Public Utilities Department

Additional information obtained from these interviews is presented in the appropriate sections of this Report.

8.0 FINDINGS, DATA GAPS, AND RECOMMENDATIONS

This section summarizes the findings of the Site assessment, data gaps encountered, and recommendations for further action.

8.1 Findings

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 of 26 and 30 – 40 West Market Street, the property. Any exceptions to, or deletions from, this practice are described in Section 8 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- The presence of a transformer building at 40 West Market Street;
- The presence of an unprotected monitoring well location(s) which may create a conduit for groundwater infiltration into the subsurface;
- Potential subsurface soil and groundwater impacts may exist, based on historical use of the property, and;
- Potential subsurface groundwater impacts may exist based on the findings of previous environmental investigations performed at adjacent properties.

8.2 Data Gaps

Specific data gaps encountered while conducting the Phase I ESA include the following:

- Lack of property/ownership details and inaccessibility of the transformer building. This data gap will likely be remedied pending discussion with the property owner.

8.3 Recommendations

Based on the conditions noted within this Phase I ESA Report, Trarza recommends that the following activities be performed in order to mitigate potential or perceived RECs:

- Verify the status, use, and condition of the transformer building at 40 West Market Street. If historical release(s) of PCBs are suspected, then confirmation of subsurface soil and groundwater conditions is also suggested immediately adjacent and/or beneath the structure.
- Further investigate the previous use, storage, and/or existence of petroleum products at the Site as well as the results of previous investigations.
- Provide for appropriate protection or abandonment of the existing on Site monitoring points.

9.0 REFERENCES

American Society for Testing and Materials. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM E 1527-05.

Mr. David Bernolfo, Bamberger and Associates contact, 26, 30-40 West Market Properties, July 12, 2007.

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Phase I Environmental Site Assessment for the Proposed New annex to the Frank E. Moss Courthouse, Salt Lake City, Utah, January 1997, prepared by Balloffet and Associates, Inc.

Phase II Site Assessment, Frank E. Moss Federal Courthouse Expansion, September 2002, prepared by Entranco.

Phase II Site Assessment Report, Frank E. Moss Federal Courthouse Expansion, Chevron Station and Odd Fellows relocation Property, Located at 351 South West Temple and 30 and 40 West Market Street, Salt Lake City, Utah, July 2003, prepared by AMEC Earth & Environmental, Inc.

Utah State Historical Society, Sanborn Fire Insurance Maps archive, July 12-13, 2007.

Utah State Historical Society, Salt Lake City historical directories archive, July 12-13, 2007.

Salt Lake County Recorder, website and archives, July 10-13, 2007.